

Appl. No. 10/814,682
Reply to Examiner's Action dated October 14, 2005

REMARKS/ARGUMENTS

I. Rejection of Claims 21-27 and 37-40 under 35 U.S.C. §103

The Examiner has rejected Claims 21-27 and 37-40 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,500,391 to Bevk, *et al.* (Bevk). As the Examiner is no doubt aware, determination of obviousness requires consideration of the invention considered as a whole; the inquiry is not whether each element exists in the prior art, but whether the prior art made obvious the invention as a whole. Furthermore, there must be some suggestion or teaching in the art that would motivate one of ordinary skill in the art to arrive at the claimed invention; a reference that teaches away from a claimed invention strongly indicates nonobviousness. Moreover, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Applicant's disclosure.

Turning to Figure 2 in Bevk, a process for making a MOS device is described that includes a structure with a boron-doped, epitaxial, silicon layer 32 enclosed between upper and germanium-rich, epitaxial, boundary layers 34. Each of the boundary layers will typically consist of at least two, but fewer than six, monolayers of substantially pure germanium. (Col. 3, lines 21-26). The Examiner notes that "substantially pure" encompasses a level of impurity and refers to figure of

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Bevk showing boron atoms migrating from layer 110 to the substrate 10. However, Bevk does not disclose or describe a co-doped germanium buried layer. The impurity in the germanium layer in Bevk arises as a result of migration and not as a result of co-doping during the process of manufacturing. Thus, because Bevk does not teach or suggest all the limitations of independent Claims 21 and 37, it does not render the present invention obvious. Inasmuch as Bevk fails to teach or suggest the invention recited in independent Claims 21 and 37, it also does not teach or suggest the invention recited in dependent claims 22-27 and 38-40, each of which is dependent on either Claim 21 or Claim 37.

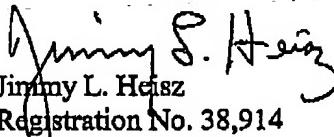
In view of the foregoing remarks, the cited reference does not support the Examiner's rejection of Claims 21-27 and 38-40 under 35 U.S.C. §103(a). The Applicants therefore respectfully request the Examiner to withdraw the rejection.

II. Conclusion

In view of the foregoing amendment and remarks, the Applicants now see all of the claims currently pending in this application to be in condition for allowance and therefore earnestly solicit a Notice of Allowance for Claims 21-27 and 38-40.

Respectfully submitted,

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